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The spectrum of EG UMa

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Abstract

Spectra and radial-velocity curves for the precataclysmic variable EG UMa are analyzed. The system ephemeris has been improved and all system parameters determined. The parameters of the secondary are consistent with current evolutionary models for single main-sequence M stars with atmospheric metallicities exceeding the solar value by 0.5 dex. We have verified that the rotational velocity of the red dwarf exceeds the velocity corresponding to synchronous orbital motion by a factor of two to three. This suggests that the efficiency of tidal interactions between the components in the synchronization of their motion is low. The observed Ca II emission lines display reflection effects in a number of uniform spectra of EG UMa obtained during the quiescent state of the secondary. © 2002 MAIK "Nauka/Interperiodica".

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